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UNITED NATIONS DEVELOPMENT PROGRAMME

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APPROVAL OF UNDP ASSISTANCE TO A PROJECT OF
INDONESIA

IPF:(1987-91) $ 62 659 700

(INS/89/016) - Science and Technology Management Information System

Date of approval by the AC:[1]	9 November 1990
Expected duration:	Three years and six months
Proposed executing agency:	United Nations Education, Scientific and Cultural Organization (UNESCO)
Government implementing agency:	Centre for Analysis of Science and Technology Development (PAPIPTEK-LIPI)
Proposed UNDP contribution:	$695 000 Source of funds:IPF

Project background

As a "vehicle for technological transformation" the Government of Indonesia has identified a set of ten strategic industries; and mentained the underlying philosophy that national technology capability will be most effectively strengthened through a process of "progressive manufacturing" using the basic principle of learning by doing. The learning process presently involves the utilization of existing technologies acquired through technology transfer from industrialized countries, adaptation of imported technologies for local conditions and then utilization of the appropriate technologies for increasing the value-addition in manufacture, and utilization of innovative (new and emerging) technologies for achieving competitiveness in the market-place. With rapid growth of activities in this direction, the management of S&T has become increasingly complex in Indonesia.

To help deal with this complexity, the Government has also recognized the need for an information system to optimize the country's S&T activities and their impact on economic and social welfare for the people. There are several key S&T agencies in the country (e.g. MENRISTEK, BPPT, BPIS, LIPI), which have found an increasing need to enhance their capability to make informed decisions for the management of S&T for restructuring industry, improving productivity and introducing technological innovations to the strategic industries.

The Government is now introducing a strategy of "technology-led development" as

[1] This Fact Sheet reflects the status of the project/revision at the time it was approved by the Action Committee; modifications to the project/revision may have occurred subsequently.

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a point of departure in designing the next economic and social development plans for the nation (REPELITA). This will require information for the adoption of an effective policy framework both for the management of R&D and the application of internationally available technologies in public and private sector industries of Indonesia. Foreign technology licensing weaknesses are due to the poor information base on available technologies and the limited ability of small enterprises to assess and acquire foreign technology. Setting up better information on alternative technologies and technology supplies is not just a matter of tapping into good databases; it also requires setting up a system for making that information accessible to users. The small firms need more explicit support and training to help them assess technology options and to negotiate for imported technology. To establish a Science and Technology Management Information System, the Government has requested UNDP assistance under the present approval.

Description of project

The development objective of the project is to promote the rationalization of S&T management plans, a target which is crucial both for establishing science and technology related policies. The immediate objective of the project is to design, install and sustain a dynamic "science and technology management information system" (STMIS) for Indonesia. Project activities will include: (a) creating human resources development for enhancing national technological capability; and (b) establishing indigenous capacity building for transfer and utilization of modern technologies local industries.

Inputs

UNDP will provide the required expert services, training equipment and other required services. PERSONNEL: an international expert/consultant in technology policy & planning (nine man-months); science & technology management (2.5 man-months); information system science & technology statistics (1.0 man-month); indicators development science and technology indicators (0.5 man-month); measurement of technology and indicators (1.5 man-months); support personnel (39 man-months); national project professional personnel: system & database design (eight man-months); statistics & MIS analysis expert (eight man-months), survey & census (6 man-months); Sub-Contracts in pilot data collection and data entry; fellowship programme on management of technology, special group training on computer application and database for STMIS development, special short-term training on COS/ISIS, study visit programmes to institutes dealing with STMIS; equipment including one scanner, one unit server (PC/326, 16 bytes hard disk, tape back-up ARCNET CARP), 10 Unit PC/AT (one M byte ram EMSLIM EGA color monitor, ARC net card), one UPS one Kw, one Modem 1200/2400 BPS, one Law hubs with 1000 m cables, one color ink jet, one Ddot Matric printer Fx-800, one computerized color overhead projector/slide; miscellaneous costs incurred in the implementation of the project and in the preparation of periodic reports.

Financial data

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Personnel	306 000
Subcontract	20 000
Training	225 500
Equipment	110 000
Miscellaneous	33 500
Total	695 000